

Receipt
FILE COPY #5

PATENT
Atty. Dkt. No.: 7095.0010-06/6/00
Sony Ref. No.: 50M2327.01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ching Fang-Chang, et al.

Serial No.: 09/501,182

Filed: February 10, 2000

For: MOTION ESTIMATION PROCESS AND SYSTEM
USING SPARSE SEARCH BLOCK-MATCHING
INTEGRAL PROJECTION



RECEIVED
MAY 24 2000
Group Art Unit: 2713

Examiner: Unassigned

Assistant Commissioner for Patents
Washington, D.C. 20231

OFFICE OF INITIAL PATENT EXAMINATION

REQUEST FOR CORRECTED FILING RECEIPT

Enclosed is a copy of an Official Filing Receipt that was received from the U.S. Patent and Trademark Office for the above-identified patent application. The Receipt has been reviewed and an error in the title has been found. As indicated in ink on the attached copy, the title should read as follows:

MOTION ESTIMATION PROCESS AND SYSTEM USING **SPARSE SEARCH** BLOCK-MATCHING AND INTEGRAL PROTECTION

We enclose a copy of the Declaration and Power of Attorney as well as the postcard to show the correct title.

It is respectfully requested that a corrected Filing Receipt be issued as soon as possible.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: April 27, 2000

By: 

Linda J. Thayer
Reg. No. 45,681

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N.W.
WASHINGTON, DC 20005
202-408-4000

REC-25T

FILING RECEIPT



OC000000005037192

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark OfficeAddress: ASSISTANT SECRETARY AND
COMMISSIONER OF PATENT AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/501,182	02/10/2000	2713	690	7095.0010-01	12	4	2

Finnegan Henderson Farabow
Garrett and Dunner LLP
1301 I Street NW
Washington, DC 20005-3315

Date Mailed 04/07/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Ching-Fang Chang, San Jose, CA ;
Naofumi Yanagihara, Tokyo, JAPAN;

Continuing Data as Claimed by Applicant

THIS APPLICATION IS A DIV OF 09/081,279 05/20/1998

Foreign Applications

If Required, Foreign Filing License Granted 04/07/2000

**

Title

Motion estimation process and system using ^{Sparse Search} block-matching and integral projection

Preliminary Class

348

Data entry by : THOMAS, SHEILA

Team : OIPE

Date: 04/07/2000



RECEIVED

APR 11 2000

FINNEGAN, HENDERSON, FARABOW,
GARRETT AND DUNNER, LLP

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first, and sole inventor (if only one name is listed below) or an original first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

MOTION ESTIMATION PROCESS AND SYSTEM USING SPARSE SEARCH BLOCK-MATCHING AND INTEGRAL PROJECTION

the specification of which was filed on May 20, 1998.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate or § 365(a) of any PCT international application(s) designating at least one country other than the United States, listed below and have also identified below, any foreign application(s) for patent or inventor's certificate, or any PCT International application(s) having a filing date before that of the application(s) of which priority is claimed:

Country	Application Number	Date of Filing	Priority Claimed Under 35
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number	Date of Filing

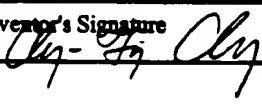
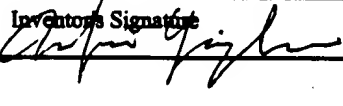
I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application(s) and the national or PCT International filing date of this application:

Application Number	Date of Filing	Status (Patented, Pending, Abandoned)

I hereby appoint the following attorney and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. **FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.**, Douglas B. Henderson, Reg. No. 20,291; Ford F. Farabow, Jr., Reg. No. 20,630; Arthur S. Garrett, Reg. No. 20,338; Donald R. Dunner, Reg. No. 19,073; Brian G. Brunsvold, Reg. No. 22,593; Tipton D. Jennings, IV, Reg. No. 20,645; Jerry D. Voight, Reg. No. 23,020; Laurence R. Hefter, Reg. No. 20,827; Kenneth E. Payne, Reg. No. 23,098; Herbert H. Mintz, Reg. No. 26,691; C. Larry O'Rourke, Reg. No. 26,014; Albert J. Santorelli, Reg. No. 22,610; Michael C. Elmer, Reg. No. 25,857; Richard H. Smith, Reg. No. 20,609; Stephen L. Peterson, Reg. No. 26,325; John M. Romary, Reg. No. 26,331; Bruce C. Zotter, Reg. No. 27,680; Dennis P. O'Reilly, Reg. No. 27,932; Allen M. Sokal, Reg. No. 26,695; Robert D. Bajefsky, Reg. No. 25,387; Richard L. Stroup, Reg. No. 28,478; David W. Hill, Reg. No.

28,220; Thomas L. Irving, Reg. No. 28,619; Charles E. Lipsey, Reg. No. 28,165; Thomas W. Winland, Reg. No. 27,605; Basil J. Lewis, Reg. No. 28,818; Martin I. Fuchs, Reg. No. 28,508; E. Robert Yoches, Reg. No. 30,120; Barry W. Graham, Reg. No. 29,924; Susan Haberman Griffen, Reg. No. 30,907; Richard B. Racine, Reg. No. 30,415; Thomas H. Jenkins, Reg. No. 30,857; Robert E. Converse, Jr., Reg. No. 27,432; Clair X. Mullen, Jr., Reg. No. 20,348; Christopher P. Foley, Reg. No. 31,354; John C. Paul, Reg. No. 30,413; Roger D. Taylor, Reg. No. 28,992; David M. Kelly, Reg. No. 30,953; Kenneth J. Meyers, Reg. No. 25,146; Carol P. Einaudi, Reg. No. 32,220; Walter Y. Boyd, Jr., Reg. No. 31,738; Steven M. Anzalone, Reg. No. 32,095; Jean B. Fordis, Reg. No. 32,984; Barbara C. McCurdy, Reg. No. 32,120; James K. Hammond, Reg. No. 31,964; Richard V. Burgujian, Reg. No. 31,744; J. Michael Jakes, Reg. No. 32,824; Dirk D. Thomas, Reg. No. 32,600; Thomas W. Banks, Reg. No. 32,719; Christopher P. Isaac, Reg. No. 32,616; Bryan C. Diner, Reg. No. 32,409; M. Paul Barker, Reg. No. 32,013; Andrew Chanho Sonu, Reg. No. 33,457; David S. Forman, Reg. No. 33,694; Vincent P. Kovalick, Reg. No. 32,867; James W. Edmondson, Reg. No. 33,871; Michael R. McGurk, Reg. No. 32,045; Joann M. Neth, Reg. No. 36,363; Gerson S. Panitch, Reg. No. 33,751; Cheri M. Taylor, Reg. No. 33,216; Charles E. Van Horn, Reg. No. 40,266; Linda A. Wadler, Reg. No. 33,218; and Allen M. Lo, Reg. No. 37,059. Please address all correspondence to FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P. 1300 I Street, N.W., Washington, D.C. 20005, Telephone No. (202) 408-4000.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full Name of First Inventor Ching-Fang CHANG	Inventor's Signature 	Date May 22, 1998
Residence 6560 Capri Way, San Jose, CA 95129		Citizenship Taiwan, Republic of China
Post Office Address 6560 Capri Way, San Jose, CA 95129		
Full Name of Second Inventor Naofumi YANAGIHARA	Inventor's Signature 	Date May 26, 98
Residence 3-16-1-407 Unoki, Ota-ku, Tokyo, JAPAN		Citizenship Japan
Post Office Address 3-16-1-407 Unoki, Ota-ku, Tokyo, JAPAN		
Full Name of Third Inventor	Inventor's Signature	Date
Residence		Citizenship
Post Office Address		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Prior Application Serial No.: 09/081,279

Art Unit: 2713

Examiner: N. Diep



SIR: This is a request for filing a

☐ Continuation ☐ Continuation-in-Part ☒ Divisional Application under 37 C.F.R. § 1.53(b) of pending prior application Serial No. 09/081,279 filed May 20, 1998, of Ching-Fang Chang and Naofumi Yanagihara for MOTION ESTIMATION PROCESS AND SYSTEM USING SPARSE SEARCH BLOCK-MATCHING AND INTEGRAL PROJECTION.

1. ☒ Enclosed is a complete copy of the prior application including the oath or Declaration and drawings, if any, as originally filed. I hereby verify that the attached papers are a true copy of prior application Serial No. 09/081,279 as originally filed on May 20, 1998.
2. ☐ Enclosed is a substitute specification under 37 C.F.R. § 1.125.
3. ☒ Cancel Claims 1-25.
4. ☐ A Preliminary Amendment is enclosed.
5. ☒ The filing fee is calculated on the basis of the claims existing in the prior application as amended at 3 and 4 above.

Basic Application Filing Fee					\$690	\$ 690.00
	Number of Claims		Basic	Extra Claims		
Total Claims	4	-	20	0	x \$18	
Independent Claims	2	-	3	0	x \$78	
[] Presentation of Multiple Dep. Claim(s)					+\$260	
					Subtotal	\$ 690.00
					Reduction by 1/2 if small entity	-
TOTAL APPLICATION FILING FEE						\$ 690.00

Assistant Commissioner for Patents

February 9, 2000

Page 2

6. ☒ A check in the amount of \$690.00 to cover the filing fee is enclosed.
7. ☒ The Commissioner is hereby authorized to charge any fees which may be required including fees due under 37 C.F.R. § 1.16 and any other fees due under 37 C.F.R. § 1.17, or credit any overpayment during the pendency of this application to Deposit Account No. 06-0916.
8. ☒ Amend the specification by inserting before the first line, the sentence:

--This is a divisional of application Serial No. 09/081,279, filed May 20, 1998, the contents of which are hereby incorporated by reference.
9. ☐ New formal drawings are enclosed.
10. ☒ The prior application is assigned of record to: Sony Electronics, Inc. and Sony Corporation.
11. ☐ Priority of application Serial No. _____, filed on _____ in _____ (country) is claimed under 35 U.S.C. § 119. A certified copy

☐ is enclosed or ☐ is on file in the prior application.
12. ☐ A verified statement claiming small entity status

☐ is enclosed or ☐ is on file in the prior application.
13. ☒ The power of attorney in the prior application is to at least one of the following: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P., Douglas B. Henderson, Reg. No. 20,291; Ford F. Farabow, Jr., Reg. No. 20,630; Arthur S. Garrett, Reg. No. 20,338; Donald R. Dunner, Reg. No. 19,073; Brian G. Brunsvold, Reg. No. 22,593; Tipton D. Jennings, IV, Reg. No. 20,645; Jerry D. Voight, Reg. No. 23,020; Laurence R. Hefter, Reg. No. 20,827; Kenneth E. Payne, Reg. No. 23,098; Herbert H. Mintz, Reg. No. 26,691; C. Larry O'Rourke, Reg. No. 26,014; Albert J. Santorelli, Reg. No. 22,610; Michael C. Elmer, Reg. No. 25,857; Richard H. Smith, Reg. No. 20,609; Stephen L. Peterson, Reg. No. 26,325; John M. Romary, Reg. No. 26,331; Bruce C. Zotter, Reg. No. 27,680; Dennis P. O'Reilly, Reg. No. 27,932; Allen M. Sokal, Reg. No. 26,695; Robert D. Bajefsky, Reg. No. 25,387; Richard L. Stroup, Reg. No. 28,478; David W. Hill, Reg. No. 28,220; Thomas L. Irving, Reg. No. 28,619; Charles E. Lipsey, Reg. No. 28,165; Thomas W. Winland, Reg. No. 27,605; Basil J. Lewis, Reg. No. 28,818; Martin I. Fuchs, Reg. No. 28,508; E. Robert Yoches, Reg. No. 30,120; Barry W. Graham, Reg. No. 29,924; Susan Haberman Griffen, Reg. No. 30,907; Richard B. Racine, Reg. No. 30,415; Thomas H. Jenkins,

Reg. No. 30,857; Robert E. Converse, Jr., Reg. No. 27,432; Clair X. Mullen, Jr., Reg. No. 20,348; Christopher P. Foley, Reg. No. 31,354; John C. Paul, Reg. No. 30,413; David M. Kelly, Reg. No. 30,953; Kenneth J. Meyers, Reg. No. 25,146; Carol P. Einaudi, Reg. No. 32,220; Walter Y. Boyd, Jr., Reg. No. 31,738; Steven M. Anzalone, Reg. No. 32,095; Jean B. Fordis, Reg. No. 32,984; Roger D. Taylor, Reg. 28,992; Barbara C. McCurdy, Reg. No. 32,120; James K. Hammond, Reg. No. 31,964; Richard V. Burgujian, Reg. No. 31,744; J. Michael Jakes, Reg. No. 32,824; Thomas W. Banks, Reg. No. 32,719; Christopher P. Isaac, Reg. No. 32,616; Bryan C. Diner, Reg. No. 32,409; M. Paul Barker, Reg. No. 32,013; Andrew Chanhon Sonu, Reg. No. 33,457; David S. Forman, Reg. No. 33,694; Vincent P. Kovalick, Reg. No. 32,867; James W. Edmondson, Reg. No. 33,871; Michael R. McGurk, Reg. No. 32,045; Joann M. Neth, Reg. No. 36,363; Gerson S. Panitch, Reg. No. 33,751; Cheri M. Taylor, Reg. No. 33,216; Charles E. Van Horn, Reg. No. 40,266; Linda A. Wadler, Reg. No. 33,218; Jeffrey A. Berkowitz, Reg. No. 36,743; Michael R. Kelly, Reg. No. 33, 921; and James B. Monroe, Reg. No. 33,971; Doris Johnson Hines, Reg. No. 34,629; Allen R. Jensen, Reg. No. 28,224; Lori Ann Johnson, Reg. No. 34,498; and David A. Manspeizer, Reg. No. 37,540.

14. ☒ The power appears in the original declaration of the prior application.
15. ☐ Since the power does not appear in the original declaration, a copy of the power in the prior application is enclosed.
16. ☒ Please address all correspondence to FINNEGAN, HENDERSON, FARABOW, GARRETT and DUNNER, L.L.P., 1300 I Street, N.W., Washington, D.C. 20005-3315.
17. ☒ Recognize as associate attorney Linda J. Thayer, Reg. No. P45,681.
18. ☐ Also enclosed is _____

Assistant Commissioner for Patents
February 9, 2000
Page 4

PETITION FOR EXTENSION. If any extension of time is necessary for the filing of this application, including any extension in the parent application, Serial No. 09/081,279, filed May 20, 1998, for the purpose of maintaining copendency between the parent application and this application, and such extension has not otherwise been requested, such an extension is hereby requested, and the Commissioner is authorized to charge necessary fees for such an extension to our Deposit Account No. 06-0916. A duplicate copy of this paper is enclosed for use in charging the deposit account.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: February 9, 2000

By: Linda J. Thayer
Linda J. Thayer
Reg. No.: P45,681